UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,193	07/16/2001	Frank Burkert	1454.1076	3054

21171	7590	08/15/2005

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EXAMINER
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ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *08 June 2005*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-6* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-6* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☒ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. *05/20/05* .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims **1-6** are rejected under 35 U.S.C. 102(b) as being clearly anticipated by

Levine et al (US 6,000,053).

Regarding claim **1**, a method for protecting against packet losses in packet

oriented data transmission is anticipated by *"present invention provides error recovery*

for variable length data packets" as disclosed in column 5, lines 42-46

Storing n data packets in a memory together with end-of-packet (*additional*

packet fields) information is anticipated by *"plurality of data packets*

310,320,330....360....380 are stored at the system 222 for transmitting then to a target

computer system 225 and these packets includes additional packet fields" disclosed in

Fig. 3A or column 3, lines 65-67 and column 4, lines .

Transmitting data packets from a transmitter to a receiver with an item of end of

packet information *(additional packet field)* in each data packet is anticipated by "

transmitting computer transmit data packet 310,320,330....360....380 to a target

computer system 225" disclosed in column 4, lines 40-45.

Converting at the transmitter (*transmitting computer 222*), after said transmitting

of the data packets, redundant packets *(parity packet)* into n-equal sized redundant

packets is anticipated by *"other parity packet format are also possible(multiple parity packets"* disclosed in column 4, lines 22-43, each having a length equal to longest one of data packets is anticipated by *"parity packet equals to the length of longest data packet"* disclosed in column 4, lines 30-37, by filling with a known padding data is anticipated by *"padded portions"* disclosed in column 4, lines 22-25.

Transmitting the equal-sized redundant packet (parity packets) is anticipated by *"transmitting the parity packet to the target computer system"* disclosed in column 4, lines 44-46.

Obtaining reproduced data packet from the data packets and the end-of packet information received from the transmitter by the receiver, if no packet has been lost during transmission is anticipated by *"receiving a plurality of data packets having different lengths"* disclosed in block 510 in fig.5.

Converting, if at least one packet is lost during the transmission and this error is correctable is anticipated by *"data packet is lost somewhere in network"* disclosed in column 4, lines 63-67 column 5 lines 1-2, all the received data packets into equal-sized reconstructed data packet by filling with known padding data is anticipated by *"padding all the received data packets"* disclosed in column 5, line 16-18.

Fig. 5 anticipates *"Obtaining at the receiver"*, if at least one lost packet is not received and this error is correctable, the reproduced data packet from equal-sized reconstructed data packets, the end-of-packet information and at least one equal sized redundant packet received from the transmitter to replace the at least one lost packet is

anticipated by *"reconstructing the lost/corrupted data packet by padding the data packet and computing the lost/corrupted data packet"* disclosed in step 540, in fig.5.

Regarding claim **2**, the method as claimed in claim 1,wherein the end-of packet information is provided by stating packet length in packet header is anticipated by *"packet includes additional information"* as disclosed in column 4, lines 40-43.

Regarding claim **3**, the method as claimed in claim 1,wherein the end-of packet information is provided by flag byte at the end of each data packet *"packet includes additional information"* as disclosed in column 4, lines 40-43.

Regarding claim **4**, the method of claim 3,wherein, if no data packet was lost, the reproduced data packet are obtained by removing the flag byte is anticipated by *"determining a lost or corrupted data packet of the data packet"* as disclosed in step 530 of fig.5

wherein if at least one packet was lost and this error can be corrected, the reproduced data packet are obtained from the equal-sized reconstructed data packets and the at least one equal sized redundant packet by removing the flag byte and any subsequent padding data is anticipated by *"reconstructing the lost/corrupted data packet by padding the data packet and computing the lost/corrupted data packet"* disclosed in step 540, in fig.5.

Regarding claim **5,** an apparatus for protecting against packet losses in packet-oriented data transmission is anticipated by *"present invention provides error recovery for variable length data packets"* as disclosed in column 5, lines 42-46, comprising:

A transmitter to form and transmit data packets with end-of-packet information is anticipated by " *transmitting computer transmit data packet 310,320,330....360....380*" disclosed in column 4, lines 40-45; prior to generating redundant packets is anticipated by *"parity packet"* disclosed in column 4, lines 22-25

A receiver to receive the data packet from the said transmitter, remove the end of packet information and only if data packet was lost during transmission and this error can be reconstructed anticipated by *"reconstructing the lost/corrupted data packet by padding the data packet and computing the lost/corrupted data packet"* disclosed in step 540, in fig.5, expand the data packet with the aid of padding information to form equally long data packets before the end-of-packet information is removed is anticipated by *"padding all the received data packets up the size of longest data packet"* disclosed in column 5, line 16-18.

Regarding claim **6**, an apparatus for protecting against packet losses in packet-oriented data transmission is anticipated by *"present invention provides error recovery for variable length data packets"* as disclosed in column 5, lines 42-46

The limitation a transmitter (222-Fig 2) forming and transmitting data packets with end-of-packet information is anticipated by " *transmitting computer transmit data packet 310,320,330....360....380*" disclosed in column 4, lines 40-45; prior to generating redundant packets is anticipated by *"parity packet"* disclosed in column 4, lines 22-25. The reference discloses of transmitting data packet prior to transmitting parity packet (redundant packet), since the parity packet contain information about the data packet, it is transmitted after data packets in column 4, lines 38-66 and column 5, lines 1-15.

Fig 2 of Levine et al. anticipates the limitation a receiver (225) receiving the data

packets from the said transmitter (222).

The limitation if a data packet was not received successfully and can be

reconstructed is disclosed in column 5, lines 3-19.

The limitation reconstructing the data packet using at least a corresponding

redundant equal-sized packet (parity packet) received from the transmitter is disclosed

in column 5, lines 3-19. The reference discloses using parity packet received from the

transmitter to reconstruct the data packets as disclosed in column 5, lines 3-19.

Response to Arguments

2.   Applicant's arguments filed 06/08/2005 have been fully considered but they are

not persuasive.

3.   Regarding claim **1**, Applicant argues that Levine et al. fails to teach converting at

the transmitter, after said transmitting of data packets, redundant packet into n equal

sized redundant packets and obtaining the reproduced data packet from the equal sized

reconstructed data packets, the end-of the packet information and at least one equal

sized redundant packet received from the transmitter to replace the at least one lost

packet. These contentions are noted. However Levine et al. teaches the concept of

transmitting data packet prior to transmitting parity packet (redundant packet), since the

parity packet contain information about the data packet, it is transmitted after data

packets and the parity packet is used to obtain the lost data packet as spoken of in

column 4, lines 38-66 and column 5, lines 1-15.It is held that these teachings anticipate

the limitations of claim 1.

4.   Regarding claim **3**, Applicant argues that Levine et al. fails to teach the end of

packet information is provided by a flag byte at the end of each data packet. These

contentions are noted. However Levine et al. teaches the concept of data packet may

include additional packet fields which could be a flag byte at the end of each data

packet as spoken of in column 4, lines 40-43. It is held that these teachings anticipate

the limitations of claim 3.

5.   Regarding claim **5**, Applicant argues that Levine at al. fails to teach a transmitter

to form and transmit data packets with end-of-packet information prior to generating a

redundant packet. Applicant also argues that Levine at al. fails to teach a receiver

expands the data packet with aid of padding information to from equally long data

packets before end-of-packet information is removed. These contentions are noted.

However Levine et al. teaches the concept of teaches the concept of transmitting data

packet prior to transmitting parity packet (redundant packet), since the parity packet

contain information about the data packet, it is transmitted after data packets and the

parity packet is used to obtain the lost data packet with aid of padding information to

from equally long data as spoken of in column 4, lines 38-66 and column 5, lines 1-15. It

is held that these teachings anticipate the limitations of claim 3.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Nelson (US 6,668,290).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Puneet Bhandari whose telephone number is 571-272-2057. The

examiner can normally be reached on 9.00 AM To 5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Puneet Bhandari
Examiner
Art Unit 2666